



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/782,656	02/18/2004	Robert McCarthy	200311470-1	5486

22879 7590 01/17/2007  
HEWLETT PACKARD COMPANY  
P O BOX 272400, 3404 E. HARMONY ROAD  
INTELLECTUAL PROPERTY ADMINISTRATION  
FORT COLLINS, CO 80527-2400

EXAMINER
----------

MCCLAIN, GERALD

ART UNIT	PAPER NUMBER
----------	--------------

3653

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/17/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/782,656

Applicant(s)

MCCARTHY, ROBERT

Examiner

Gerald W. McClain

Art Unit

3653

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2,4-10,12-16 and 18-21 is/are pending in the application.
- 4a) Of the above claim(s) 3,11 and 17 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10 and 18 is/are allowed.
- 6) ☒ Claim(s) 1,2,4-9,12-16 and 19-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)         | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

The amendment filed 8 December 2006 has been entered.

#### ***Specification***

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Media Handling Device Utilizing Independent Offset Cups On A Support.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 7-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Krueger (U.S. 2,231,339).

Claim 7: rotor (67); axis (of rotation) (center of 67); first distance (See Fig. 7, 65); second distance (See Fig. 7, 65);

Claims 7-9: coupling members (CM, see FIG. G1);

Claim 9: suction cups (SC, see FIG. G1); vacuum source (page 3, column 1, lines 5-8);

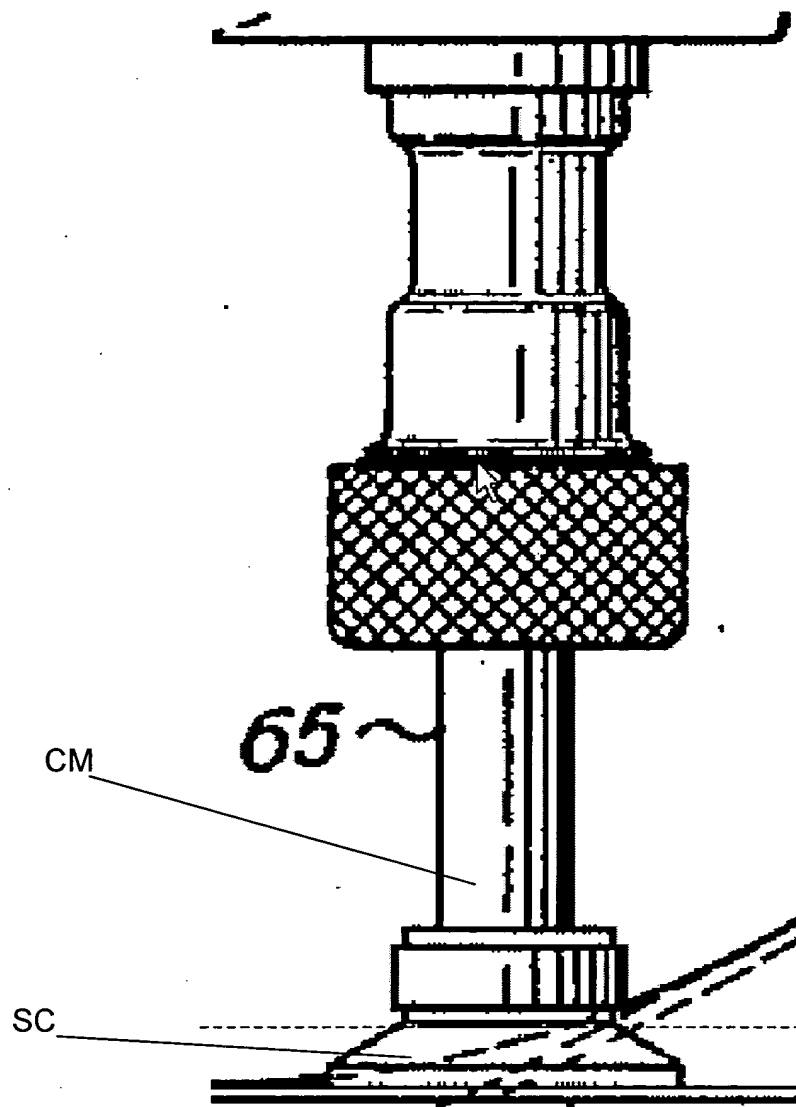


FIG. G1

Claim 19 is rejected under 35 U.S.C. 102(b) as being anticipated by Wirz (U.S. 4,378,734).

Claim 19: gripping a sheet of print media at different locations of the print media, the different locations being disposed along a line orthogonal to a direction of movement

Art Unit: 3653

of the print media such that the sheet of print media has a corrugated cross-section along the line orthogonal to a direction of movement;

rotating the print media about an axis, at least two of the different locations being different distances from the axis (column 1, lines 35-41).

Claims 20-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Becker (U.S. 4,024,814).

Claim 20: means for gripping a sheet of print media at different locations of the print media, the different locations being disposed along a line orthogonal to a direction of movement of the print media such that the sheet of print media has a corrugated cross- section along the line orthogonal to a direction of movement (13);

means for rotating the print media about an axis such that at least two of the different locations are different distances from the axis (13);

Claim 21: forming an image on a medium (abstract, line 1); corrugating the medium (13, see Fig. 12).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 3653

Claims 1-2, 4-5, 13-14, and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krueger in view of Hudson et al. (U.S. 2004/0113349) ("Hudson").

Krueger teaches

Claims 1 and 4: support (67); cups (65);

Claim 1: distal surfaces (90);

Claim 1: first plane (See Fig. 7, 65); second plane (See Fig. 7, 65);

Claim 2: rotatable member (67);

Claim 4: axis (of rotation) (center of 67),

where "cups" are equivalent to "suction members". Krueger does not directly show a liquid electrophotography print engine or a drum.

Hudson shows a similar device having a liquid electrophotography print engine (paragraph [0020], lines 3-7) and a drum (22) for the purpose of inexpensively reproducing print media. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention to modify Krueger as taught by Hudson and include Hudson's similar device having a liquid electrophotography print engine and a drum for the purpose of inexpensively reproducing print media.

Claims 6 and 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Krueger in view of Hudson and Tajima (JP 62-215441). Krueger and Hudson teach all the limitations of the claim as discussed above. Krueger and Hudson do not directly show at least four suction members.

Tajima shows a similar device having at least four suction members (66a-66e) for the purpose of balancing the medium [sic] in the printing device. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention to modify Krueger and Hudson as taught by Tajima and include Tajima's similar device having at least four suction members for the purpose of balancing the medium [sic] in the printing device.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Krueger in view of Wirz. Krueger teaches all the limitations of the claim as discussed above. Krueger does not directly show a gripper.

Wirz shows a similar device having a gripper (4) for the purpose of smoothing the sheet in travel direction (abstract). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention to modify Krueger as taught by Wirz and include Wirz's similar device having a gripper for the purpose of smoothing the sheet in travel direction.

***Allowable Subject Matter***

Claims 10 and 18 are allowed.

The following is a statement of reasons for the indication of allowable subject matter: the sets of suction cups are rotatable independently from the second set of suction cups.

***Response to Amendment***

The suggested title is 68 characters long including spaces and is more specific than "media handling". Further, the title describes the overall, novel concept disclosed in this application.

In reference to the rejection for claims 1, 2, and 4, there is a conveyor present in Krueger. However, Krueger does not show a print engine. In reference to claims 1, 2, and 4, the 35 USC § 102 rejection is withdrawn. However, claims 1, 2, and 4 are rejected under 35 USC § 103.

In reference to the claim 6, the 35 USC § 102 rejection is withdrawn. However, claim 6 has been rejected under 35 USC § 103. See the 35 USC § 103 rejection above for explanation.

In reference to the claim 7, the 35 USC § 102 rejection stands. See the 35 USC § 102 rejection above for explanation. Further, the 35 USC § 102 rejection also stands for claims 8-9.

In reference to the claim 12, the 35 USC § 102 rejection is withdrawn. However, claim 12 has been rejected under 35 USC § 103. See the 35 USC § 103 rejection above for explanation.

In reference to the claim 19, the 35 USC § 102 rejection stands. Wirz discloses that in the system in question, "the component of the tightening or tensioning motion extending in the circumferential direction of the sheet transfer cylinder **is not** along a circumferential line [parallel to the direction of movement] of the drum but, in fact, the direction of motion of the rotary sucker actually ***lies on a tangent [orthogonal to a direction of movement] to the sheet transfer cylinder.***" (emphasis added) Further, Wirz discloses that in the system in question, "the suction holes [at different locations] are at different distances from the middle point of the rotary sucker." These statements denote that "the different locations being disposed along a line orthogonal to a direction of movement of the print media such that the sheet of print media has a corrugated cross-section."

In reference to the claims 20-21, the current 35 USC § 102 rejection is withdrawn. However, claims 20-21 have been rejected under 35 USC § 102 with a new reference (a U.S. patent of German Pat. No. 24 52 096). See the 35 USC § 102 rejection above for explanation.

In reference to the claim 5, the 35 USC § 103 rejection stands. Motivation is substantiated as previously stated. Metal sheets can be the medium onto which an image is formed. Further, the 35 USC § 102 rejection also stands for claims 13-14 and 16-17.

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gerald W. McClain whose telephone number is (571) 272-7803. The examiner can normally be reached on Monday through Friday from 7:30 a.m. to 4:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick H. Mackey can be reached on (571) 272-6916. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Gerald W. McClain  
Examiner  
Art Unit 3653

  
PATRICK MACKEY  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600